



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,360	10/21/2003	Sydney Gearing	GSCA-10002/01	4243
25006	7590	05/17/2006	EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021			VANAMAN, FRANK BENNETT	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,360

Applicant(s)

GEARING, SYDNEY

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Application

1. Applicant's amendment, filed March 3, 2006, has been entered in the application. Claims 1, 4-34 are pending, with claims 2 and 3 having been canceled and claims 29-34 having been added. Applicant's amendment papers refer to claims "29-33" having been added, although the examiner notes that applicant has added a further claim as well.

Claim rejections 35 USC 112

2. Claims 15, 16, 24 and 31-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 15, line 2, it is not clear whether the recited limitation is a further limitation beyond that recited in claim 10, line 7; in claim 16, lines 1-2, it is not clear whether or not the recited limitation is a further limitation beyond that recited in claim 10, line 8; in claim 24, it is not clear whether or not the recited limitation is a further limitation beyond that recited in claim 21, lines 8-9. In claims 31 and 32, line 2, it is not clear what elements are being referred to by "first second exhaust passages".

3. As regards claims currently rejected under 35 USC §112, second paragraph, please note that rejections under 35 USC §102 and 103 should not be based upon considerable speculation as to the meaning of the terms employed and assumptions as to the scope of the claims when the claims are not definite. See *In re Steele* 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). When no reasonably definite meaning can be ascribed to certain terms in a claim, the subject matter does not become anticipated or obvious, but rather the claim becomes indefinite. See *In re Wilson* 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). As such the currently pending claims may be subject to prior art rejections not set forth herein upon the clarification of the claim language.

Claim Rejections - 35 USC 102

4. The portions of 35 USC 102 relied upon herein may be found cited in a previous office action.

5. Claims 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamoto (US 6,334,501). Kawamoto teaches a sound reducing component for a

vehicle which may be used off road, and in combination with at least one vehicle silencer (4), including an adapter (30) having an internal wall which defines an exhaust chamber, an inlet (3a) at an open end thereof, an exhaust port (connecting 30 and 32), a discharge opening (lateral opening in 31), the port capable of communicating exhaust and sound directly to the atmosphere (through the end of 3), the discharge opening operable to communicate exhaust into a pathway including a first passage (proximate 7; 5; 5a) and a second passage (proximate 5b) the respective passages having constituent portions which oriented in opposite directions (figure 6 portions 7, 5b) with the second passage (5b) leading to the atmosphere (through 40/4), passages portions 7 and 5b being mutually parallel and having an abutting arrangement (7 and 5a abutting 5b), the passages constituting an integral whole.

Claim Rejections - 35 USC 103

6. The portions of 35 USC 103 relied upon herein may be found cited in a previous office action.

7. Claims 1, 4, 5, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto (US 6,334,501). Kawamoto teaches a sound reducing component for a vehicle which may be used off road, and in combination with at least one vehicle silencer (4), including an adapter (30) having an internal wall which defines an exhaust chamber, an inlet (3a) at an open end thereof, an exhaust port (connecting 30 and 32), oriented at an angle of between 0 and 90 degrees from an axis of the exhaust discharge chamber, a discharge opening (lateral opening in 31 extending to 7 and 50a), the port capable of communicating exhaust and sound to the atmosphere (through 3), the discharge opening operable to communicate exhaust into a passage (50a), a U-joint (5) having first and second ends, the first end being connected to the exhaust passage (50a), the second end being connected to an extension (e.g., 40, 40a). The reference to Kawamoto fails specifically teach the area of the exhaust port as being smaller than that of the open end of the chamber. In that some flow is directed to the port and some is directed to the U joint and thence the extension, it would have been obvious to one of ordinary skill in the art at the time of the invention to constrict the opening into the port so as to influence the exhaust flow to pass through both the port

Art Unit: 3618

and the discharge opening. As regards claims 8 and 9, inasmuch as the reference to Kawamoto is directed to use with an exhaust system carrying high temperature gas, and further directed to quieting of the exhaust flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to make at least a portion of the component from a heat resistant material so as to ensure that the material does not break down in contact with high temperature exhaust, and further it would have been obvious to one of ordinary skill in the art at the time of the invention to make at least a portion of the component from a sound deadening material so as to ensure that as little noise as possible is transmitted to the exterior environment, as far as practical.

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto in view of Holmes (US 1,591,088). The reference to Kawamoto is discussed above and fails to teach the explicit provision of separate connecting elements for securing the first and second ends of the U-joint to the exhaust passage and extension, respectively. Holmes teaches the use of a connector device (e.g., 22) for connecting portions of an exhaust system together, to allow an adjustable connection. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the connection between the U-joint and exhaust passage and extension taught by Kawamoto with separate connector elements such as taught by Holmes, for the purpose of allowing the exhaust structure to be easily assembled together.

9. Claims 10-18, 21, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto in view of Petley (US 6,591,935). The reference to Kawamoto is discussed above, and fails to teach that the adapter is arranged to be placed with its inlet connected to the exhaust end of a silencer. Petley teaches that it is well known to provide an exhaust system having a pre-existing silencer (e.g., 14) and add a further exhaust-silencing device (e.g., 28) downstream of the existing silencer, to further reduce the noise output. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the adapter arrangement taught by Kawamoto downstream of a first silencer, e.g., such that the input 3a is connected to the discharge of the silencer, as taught by Petley, for the purpose of providing yet further sound reduction. As regards claim 13, inasmuch as Kawamoto teaches that at

Art Unit: 3618

least the output end of the exhaust passage (50a) is directed to be substantially parallel with the input (e.g., 3a, downstream end of 2a, note figure 4), it would have been obvious to one of ordinary skill in the art at the time of the invention to place the upstream silencer taught by Kawamoto as modified by Petley in a portion of the exhaust line which is parallel with the passage (e.g., the downstream section of 2a) for the purpose of locating the various sound reducing components closely proximate each other. As regards claim 23, while the reference to Kawamoto as modified by Petley fails to explicitly teach the provision of a fastener provided on the exhaust passage of the adapter, which is operable to secure the adapter to the vehicle, Kawamoto does teach the provision of fastening devices (e.g., 61, 62) for connecting to the vehicle, and it would have been obvious to one of ordinary skill in the art at the time of the invention to locate a fastener proximate the exhaust passage of Kawamoto as modified by Petley, in order to accommodate connection to a vehicle having a fastener receiving portion located more forwardly, facilitating the interchangeable use of the system on plural vehicle structures.

10. Claims 19, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto in view of Petley and Holmes. The reference to Kawamoto as modified by Petley is discussed above and fails to teach the explicit provision of separate connecting elements for securing the first and second ends of the U-joint to the exhaust passage and extension, respectively. Holmes teaches the use of a connector device (e.g., 22) for connecting portions of an exhaust system together, to allow an adjustable connection. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the connection between the U-joint and exhaust passage and extension taught by Kawamoto with separate connector elements such as taught by Holmes, for the purpose of allowing the exhaust structure to be easily assembled together.

11. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto (as addressed with respect to claims 29-32, above). As regards claim 33, the reference to Kawamoto fails specifically teach the area of the exhaust port as being smaller than that of the open end of the chamber. In that some flow is directed to

Art Unit: 3618

the port and some is directed to the U joint and thence the extension, it would have been obvious to one of ordinary skill in the art at the time of the invention to constrict the opening into the port so as to influence the exhaust flow to pass through both the port and the discharge opening. As regards claim 34, inasmuch as the reference to Kawamoto is directed to use with an exhaust system directed to quieting of the exhaust flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to make at least a portion of the component from a sound deadening material so as to ensure that as little noise as possible is transmitted to the exterior environment, as far as practical.

Response to Comments

12. As regards applicant's amendment to claims 10 and 21, the examiner notes that care should be taken to ensure that when subject matter is incorporated from a dependent claim into a parent independent claim, the dependent claim remains clear, or is canceled.

Applicant's comments concerning the modification of the reference to Kawamoto have been carefully considered. In response to applicant's argument that the references must explicitly provide a suggestion for combining, a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than the lack thereof (see *In re Sovish* 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)); further, references may be combined although none of them explicitly suggests combining one with the other (see *In re Nilssen* 7 USPQ2d 1500 (Fed. Cir. 1989)). It has long been the law that the motivation to combine need not be found in prior art references, but equally can be found "in the knowledge generally available to one of ordinary skill in the art." *In re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) (citing *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988)). The motivation to combine can be found either in a prior art reference, or it can be implicit in the knowledge of one of ordinary skill in the art. See *In re Huston*, 308

Art Unit: 3618

F.3d 1267, 1280 (Fed. Cir. 2002); *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (Fed. Cir. 1997).

Sources suggesting a combination may be: (1) the combined teachings of the prior art, (2) the knowledge of the ordinary practitioner and (3) the nature of the problem to be solved. "The test for implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000). In *Richard Ruiz and Foundation Anchoring Systems, Inc. v. A.B. Chance Company*, No. 03-1333 (Fed. Cir. January 29, 2004), the court emphasized that an "express written teaching in the art" to combine references was not required [emphasis added]. Rather, motivation may come from "the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem."

Please further note the following from Section 2144 of the MPEP: "The rationale to modify or combine the prior art does not have to be expressly stated in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent...The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem...It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by Applicant." Also Chief Judge Nies writes in a concurring opinion, "While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or the prior art specifically suggest making the combination...In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference". See *In re Oetiker* 977 F.2d 1443, 24 USPQ.2d 1443 (Fed.Cir.1992).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon

Art Unit: 3618

hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the instant case, the examiner notes that applicant's evidence that the combination should not be made constitutes mainly an argument that "the art would not favor" a system which constricts exhaust flow. Indeed in an exhaust system constituting only a single muffler, such an argument may be useful as evidence that a modification should not be made. In an arrangement having a pair of outlets (i.e., the exhaust port and the passage), such an argument is not analogous to the condition at hand, in that there are a pair of passages. As such, it is not deemed to be beyond the skill of the ordinary practitioner to adjust the size of the port for the purpose of adjusting the flow through the port. If applicant does believe that it is not within the skill of the ordinary practitioner to adjust the size of an opening or port for the purpose of adjusting the flow there-through (absent any further conditional changes) applicant should so state unequivocally on the record.

Applicant's attention is directed to the reference of Hwang (US 6,633,646) which teaches that it is well known to adjust the flow-through characteristics of an exhaust system, and that one of ordinary skill in the art would indeed not only be conversant with the concept of adjusting the size of flow passages, but also the provision of valve devices to allow adjustment of such characteristics after installation of the exhaust system.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3618

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618

Handwritten signature of F. Vanaman, dated 5/15/06.